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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/029,855 Filing Date: December 31, 2001 Appellant(s): SAURIOL ET AL.

Thomas E. Anderson For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed February 23rd, 2006, appealing from the Office action mailed August 22nd, 2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

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(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal:

Kekic et al. (U.S. Patent 6,788,315) issued on September 7th, 2004.

Henderson et al. (U.S. Patent 6,259,679) issued on July 10th, 2001

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1-20, 23, and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by *Kekic et al.* (US Patent 6,788,315, hereinafter "*Kekic*").

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3. As per claims 1 and 11, *Kekic* teaches a method for configuring networks using a processor, comprising:

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- a) abstracting interface data regarding at least one network element; (*Kekic*, column 26, lines 31-58)
- b) storing the abstracted interface data regarding the at least one network element in at least one network element database; and (*Kekic*, column 16, lines 28-50, and column 26, lines 31-58)
- b) configuring a network via communication with the abstracted interface data stored in the at least one network element database (*Kekic*, column 24, line 63 to column 25, line 36 and column 26, lines 31-58).
- 4. As per claims 2 and 12, *Kekic* teaches the system further wherein the at least one network element database comprises a set of data corresponding to network elements (*Kekic*, column 16, lines 28-44).
- 5. As per claims 3 and 13, *Kekic* teaches the system further wherein the set of data corresponding to network elements comprises data corresponding to at least one of routing elements, switching elements, optical elements, and wireless elements (*Kekic*, column 16, lines 28-44).

- 6. As per claims 4 and 14, *Kekic* teaches the system further wherein the set of data corresponding to network elements is extensible (column 16, lines 58-67, wherein checks are completed for new elements).
- 7. As per claims 5 and 15, *Kekic* teaches the system further wherein the processor comprises a user interface (*Kekic*, column 14, lines 43-65 and figure 6A).
- 8. As per claims 6 and 16, *Kekic* teaches the system further wherein the user interface comprises object oriented code (*Kekic*, column 14, lines 19-31).
- 9. As per claims 7 and 17, *Kekic* teaches the system further wherein the user interface comprises at least one of a network element list (*Kekic*, column 14, lines 43-65 and figure 6B, item 604) and a network map (*Kekic*, column 14, lines 43-65).
- 10. As per claims 8 and 18, *Kekic* teaches the system further comprising a step of c) communicating via a network port with a network to be configured (*Kekic*, column 13, line 55 to column 14, line 8, wherein the specified systems communicate via network ports, see also figure 9C).
- 11. As per claims 9 and 19, *Kekic* teaches the system further wherein the interface data comprises at least one of software interface requirements, hardware interface requirements, and protocol specifications (*Kekic*, figure 6B).

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12. As per claims 10 and 20, Kekic teaches the system further comprising a step of

d) storing an image of a network for modification (column 27, line 60 to column 28, line

31, specifically column 29, lines 29-56).

13. As per claims 23 and 24, *Kekic* teaches the system further wherein network

configuration occurs without having to execute a different proprietary tool for each of the

at least one network element (Kekic, column 26, lines 31-58, specifically the description

of the Element manager).

Claim Rejections - 35 USC § 103

- 14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 15. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Kekic et al.* (US Patent 6,788,315), further in view of *Henderson et al.* (US Patent 6,259,679, hereinafter "*Henderson*").
- 16. As per claims 21 and 22, *Kekic* teaches the above yet fails to teach wherein the processor is further operable to simulate the network.

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Henderson teaches a network management system capable of designing, simulating, and modifying the topology of a network based on representations of the network elements (column 5, lines 31-43).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have combined *Kekic* and *Henderson* to provide the management system of *Henderson* in the system of *Kekic*, because doing so would allow a flexible network management architecture that can conform to differing protocols (*Henderson*, column 2, lines 55-65).

(10) Response to Argument

In the Argument, appellant argued in substance that

(A) The Rejection under 35 U.S.C. § 102 (e) of Claims 1-20, 23, and 24, based on *Kekic* is improper, because *Kekic* does not teach or suggest the step of "abstracting interface data regarding at least one network element," as set forth in claims 1 and 11. Appellant contends that *Kekic*, while admittedly maintaining and storing abstracted network element information, fails to make an affirmative step of abstracting this information.

Furthermore, appellant contends that interface data is not abstracted, and that the examiner made an improper inherency argument concerning the abstraction step. Finally, appellant states that *Kekic* fails to teach "wherein network configuration occurs

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without having to execute a different proprietary tool for each of the at least one network element."

As to point (**A**), appellant defines the step of abstracting in the appeal brief using two portions of the specification. The first portion merely states that a JAVA module may conduct the abstracting and lists a benefit provided by the abstraction (Specification, page 2, lines 11-15). The second portion discloses the following:

"Because the hardware and software interfaces and other requirements for the one or more network element 110 are abstracted in the network element library 110, by using the network configuration platform 102 of the invention a network administrator may configure and assess a variety of network implementations without having to stop and execute a different proprietary tool for each component." (Specification, page 6, lines 21-28).

From these disclosures, the appellant teaches that the step of abstracting creates an abstracted form of "hardware and software interfaces and other requirements for the one or more network element 110" and stores these abstractions in a "network element library 110."

Kekic's element manager. Kekic teaches an element manager that "is an abstract representation of the managed computer network element that when executed on manager 404 of managed element server 314 manages and monitors the managed computer network element manager 800" (Kekic, column 26, lines 31-58). This element manager functions by first interrogating network elements

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using a discovery engine (*Kekic*, column 7, lines 20-26). When the discovery engine finds an appropriate network device, using abstraction it creates a "managed element object" that represents the physical device (*Kekic*, column 7, lines 27-33). Alternatively, a user can enter data manually, and the system will "build" an element manager by abstracting that data (*Kekic*, column 9, lines 1-8). The element manager forms an abstraction representation of attributes such as ports (i.e. hardware interfaces) and any applications (i.e. software interfaces) on the network device, among other requirements (*Kekic*, column 24, lines 17-21 and column 25, lines 60-65). Additionally, *Kekic* teaches an element manager running as a JAVA module (*Kekic*, column 8, lines 48-60). From the described functionality, *Kekic* clearly teaches the affirmative step of abstracting both hardware and software interfaces.

As to the contention that the examiner made an improper inherency argument, the examiner respectfully disagrees. In the previous action mailed November 14th, 2005, the examiner only made a statement to clarify that the phrase "abstracted data" refers to data that has been through some type of abstracting process, and was not an assertion of inherency in *Kekic*. Inherency in *Kekic* is not necessary, as the abstracting process is fully described as shown above. Finally, as to the argument that *Kekic* does not teach network configuration without the use of a different propriety tool for each element, *Kekic* teaches an element manager that is a "standardized, cross-vendor structure" (*Kekic*, column 26, lines 41-42). A tool fitting this description is the polar opposite of a proprietary tool, which by definition of the word is non-standard and unique to a vendor.

(B) The rejection under 35 U.S.C. § 103(a) of claims 21 and 22 based on *Kekic* in view of *Henderson* is improper, because there is no proper motivation to combine the systems. Specifically, *Kekic* relates to a method for managing computer elements through managed element servers and clients, and would not benefit from *Henderson*'s network management architecture that provides an overlay in which network management functions are performed.

As to point (**B**), the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, the motivation was previously given that a combination would provide *Kekic*'s system with a flexible network management architecture that could conform to differing protocols. *Kekic* teaches a network management system that manages various elements in the network based on "element objects" (*Kekic*, abstract; column 7, lines 27-33); *Henderson* teaches a network management system that simulates performance and creates assessments of a network based on abstracted network elements in the form of "network objects" (*Henderson*, abstract; column 2, lines 42-44). The obvious combination of *Henderson* would provide flexibility by enabling

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simulations and assessments of network performance prior to live implementation of the changes (*Henderson*, column 2, lines 55-65).

Additionally, *Henderson* teaches a network management system that uses a database of "network object models" representing an abstracted form of the current network components (*Henderson*, column 2, lines 42-44; column 3, lines 31-40). *Henderson* teaches advantages stemming from the simulation system, e.g. that "by simulating modifications to the network configuration, a network designer can study the effect of a proposed network configuration prior to physical implementation" and, as a result, modifications "can be made incrementally, e.g., to monitor the progress of a proposed plan of upgrade" (*Henderson*, column 3, lines 25-33). This beneficial simulation is one of many examples that would provide the "flexibility" stated as a motivation for a combining *Henderson* with *Kekic*'s management system.

For the above reasons, it is believed that the rejections should be sustained.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

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Respectfully submitted,

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